

A Perfect Polish

Exploring the Gap Between Performance and Safety

Aja Frierson, Habit Cosmetics

Overview

- Answer questions from 11/15/16
 Work Plan Implementation Update
- Provide a brand and manufacturer's perspective



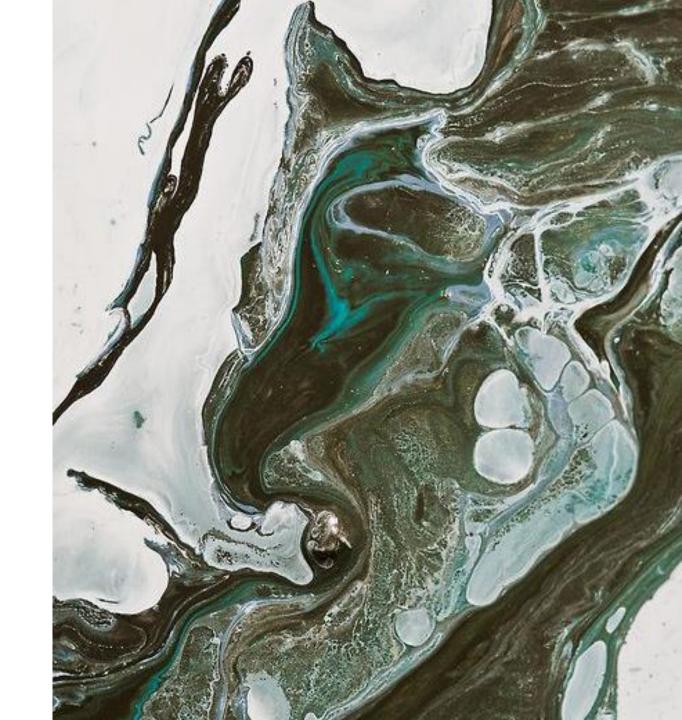


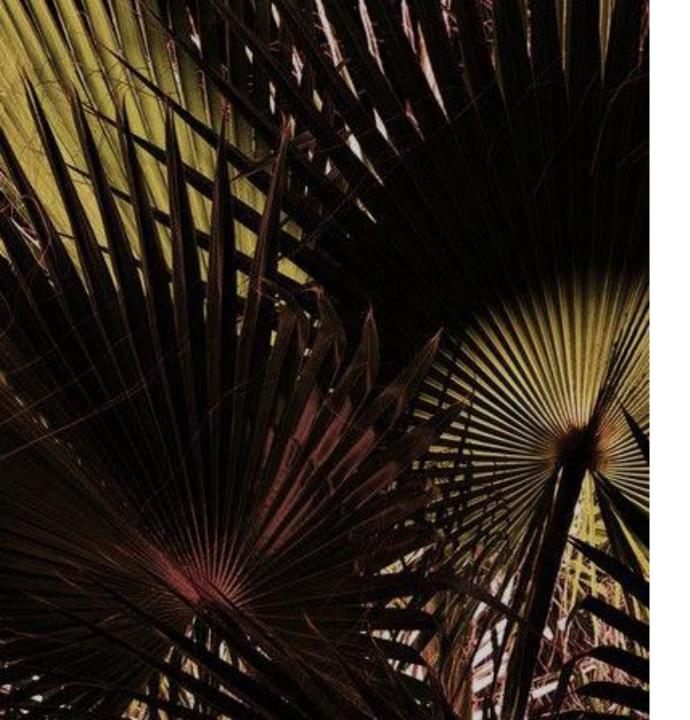
Introduction

- Founded Habit Cosmetics in June of 2013
 - Produce polish free of Toluene, Formaldehyde, Formaldehyde Resin, Camphor, TPP, DBP, Xylene and Parabens
- In development on new products launching in May

The Prevalence of Candidate Chemicals

- Habit's polish manufacturer is the largest nail polish manufacturer in the United States
- They use Formaldehyde in only one of the products they offer: a nail hardener
- They haven't used Toluene for over a decade
- DBP was removed from their polish in 2004
- Concerns over TPP are a recent development, so they removed it in 2012
- Benzophenone-1 was introduced to replace Benzophenone
- Silica is still used to suspend particles in glitter polish and to reduce gloss in matte finish polish
- Titanium dioxide is still widely used as a colorant
- Manufacturers generally provide the same formulas to everyone





Using Alternative Chemicals

- There are hundreds of plasticizers that could replace TPP and DBP, but alternative chemicals aren't always better
- Replacements for DBP and TPP are more expensive; this results in higher costs for the consumer
- Eliminating Toluene makes nail polish more expensive and difficult to make
- Isobutylphenoxy Epoxy Resin was added to make up for the loss of both Toluene and Formaldehyde Resin
 - Benzophenone-1 may be an endocrine disruptor
 - Stearalkonium Hectorite is a less attractive alternative to Silica

Manufacturing Standards

Raw material safety references and regulatory agencies for nail polishes include:

- US Food and Drug Administration via Code of Federal Regulations such as
 - 21 CRF 73 = List of Color Additives Exempt from Certification
 - 21 CRF 74 = List of Color Additives Subject to Certification
 - 21 CRF 82 = Listing of Certified Provisionally listed Colors and Specification
 - 21 CRF 250 = Special requirements for Specific Human Drugs
 - 21 CRF 700 = General Food & Drugs
- Cosmetic Ingredient Review
- International Cosmetic Ingredient Dictionary
- Cosmetic, Toiletry and Fragrance Association
- Domestic Substance List (Canada)
- Non-domestic Substance List (Canada)
- EU Cosmetic Directive
- European Chemicals Agency REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- INCI Toxicology Reports
- IARC (International Agency on Research on Cancer)
- California Clean Water Act (Prop 65)
- Verordnung (EG) Nr. 1907/2006 (REACH)
- AICS Australian Inventory of Chemical Substances
- KECL (Korean ECL) Korean Existing Chemicals List
- ENCS (MITI) Japanese Existing and New Chemical Substances
- PICCS Philippine Inventory of Chemicals and Chemical Substances
- TSCA US Toxic Substances Control Act
- Giftliste 1 (Swiss list of toxic substances, repealed in 2005)[21]





Closing Thoughts

- The DTSC might consider adding Isobutylphenoxy Epoxy Resin and Formaldehyde Resin to the Candidate Chemicals list
- Colorants, such as D&C colors and Titanium Dioxide, will be difficult to replace

Questions?

• Email me at aja@habitcosmetics.com

